

ABSTRACT

[029] The present invention relates to methods and compositions for degrading filter cakes in subterranean formations, and more specifically, to improved methods and compositions for degrading filter cakes that comprise acid-soluble portions and polymeric portions. In one embodiment, the present invention provides a method of degrading a filter cake comprising an acid-soluble portion and a polymeric portion in a subterranean formation comprising the steps of: introducing a filter cake degradation composition comprising a delayed-release acid component and a delayed-release oxidizer component to a well bore penetrating the subterranean formation; allowing the delayed-release acid component to release an acid derivative and the delayed-release oxidizer component to release an acid-consuming component; allowing the acid-consuming component to interact with the acid derivative to delay a reaction between at least a portion of the acid derivative and at least a portion of the acid-soluble portion of the filter cake and to produce hydrogen peroxide; allowing the acid derivative to degrade at least a portion of the acid-soluble portion of the filter cake after a delay period; and allowing the hydrogen peroxide to degrade at least a portion of the polymeric portion of the filter cake.